2.3.3 Plant Species

2.3.3.1 Regulatory Setting

U.S Fish and Wildlife Service (USFWS) and California Department of Fish Wildlife (CDFW) have regulatory responsibility for the protection of special-status plant species. "Special-status" species are selected for protection because they are rare and/or subject to population and habitat declines. Special status is a general term for species that are provided varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the FESA and/or the California Endangered Species Act (CESA). Please see Section 2.3.5, Threatened and Endangered Species, for detailed information about these species.

This section of the document discusses all other special-status plant species, including CDFW species of special concern, USFWS candidate species, and California Native Plant Society (CNPS) rare and endangered plants.

The regulatory requirements for FESA can be found at 16 United States Code (USC) Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. The regulatory requirements for CESA can be found at California Fish and Game Code, Section 2050, et seq. Department projects are also subject to the Native Plant Protection Act, found at California Fish and Game Code, Section 1900-1913, and the California Environmental Quality Act (CEQA), found at California Public Resources Code, Sections 21000-21177.

2.3.3.2 Affected Environment

This section has been prepared based on the analysis and findings presented in *Natural Environment Study* (June 2016) and Errata (June 2018).

The proposed project occurs within the boundaries of two habitat conservation plans. The Natural Community Conservation Act (the Act), codified in Sections 2800–2840 of the CFG Code and signed into law on October 1991, authorizes the preparation of NCCP/HCPs. The Act is a State of California effort to protect critical vegetative communities and their dependent wildlife species. The NCCP/HCP process provides an alternative to protecting species on a "single species basis" as in the FESA and CESA. Under the Act, CDFW is responsible for creating process planning and conservation guidelines for NCCP/HCP programs.

A literature review was conducted prior to initiation of the general and special-status biological surveys to determine the potential for special-status species known to occur in the proposed project region (i.e., the OCTA Measure M2 NCCP/HCP and Orange County Central/Coastal NCCP/HCP areas). The USGS El Toro and Tustin 7.5-minute quadrangles were reviewed for the CNPS' Locational Inventory of Rare and Endangered Vascular Plants of California (CNPS, 2016) and CDFW's California Natural Diversity Database (CNDDB) (CDFW, 2016). Certain plant species are recognized by federal and State resource agencies, as well as private conservation organizations, such as CNPS, as special-status species.

Twenty-four (24) special-status plant species are known to occur in the project region; therefore, they were considered for potential to occur in the BSA (Table 2.3.3-1). Most of the BSA is either developed or routinely disturbed for mowing or flood control; few areas of habitat are present that could support special-status plant species. Although some special-status plant species may occur in areas of non-native grasslands, many species require specialized soils (e.g., clay, alkaline) that are lacking in the nonnative grasslands in the BSA.

A general plant survey and vegetation mapping were completed to describe the vegetation present in the BSA and to evaluate the potential of the habitats to support special-status plant species. One special-status plant species, southern tarplant *(Centromadia parryi* ssp. *australis),* has the potential to occur in the BSA. As a result, focused surveys were conducted for southern tarplant, with a systematic survey conducted in all areas of suitable southern tarplant habitat in the BSA. A reference population was monitored to ensure that the surveys were comprehensive. The reference population of southern tarplant was confirmed blooming in Seal Beach on August 11, 2015, prior to the field survey. During the 2015 focused surveys, no southern tarplant was observed in the BSA.

Table 2.3.3-1. Special-Status Plant Species Known to Occur in the Project Region

Scientific Name	Common Name	Status			General Habitat Description*	Habitat Present (P)/ Absent (A)	Rationale (Potential for Species to Occur)	Coverage under the OCTA NCCP/HCP
		USFWS	CDFW	CRPR				
Atriplex coulteri	Coulter's saltbush	–	–	1B.2	Alkaline or clay soils in coastal bluff scrub, coastal dunes, coastal scrub, and valley and foothill grassland; 0 to 1,640 feet above msl.	A	Not expected to occur; lack of suitable habitat in the BSA.	Not covered
Atriplex pacifica	South Coast saltscale	–	–	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, playas; 0 to 984 feet above msl.	A	Not expected to occur; lack of suitable habitat in the BSA.	Not covered
Atriplex serenana var. *davidsonii*	Davidson's saltscale	–	–	1B.2	Coastal bluffs, coastal salt marsh, alkali wetlands and playas; 33 to 660 feet above msl.	A	Not expected to occur; lack of suitable habitat in the BSA.	Not covered
Brodiaea filifolia	thread-leaved brodiaea	FT	SE	1B.1	Clay soils in open chaparral, cismontane woodland, coastal scrub, playas, valley and foothill grasslands, vernal pools; 82 to 2,822 feet above msl.	A	Not expected to occur; lack of suitable habitat in the BSA.	Not covered
Calochortus weedii var. *intermedius*	intermediate mariposa lily	–	–	1B.2	Rocky or calcareous soils in chaparral, coastal scrub, valley and foothill grasslands; 0 to 2,231 feet above msl.	A	Not expected to occur; lack of suitable habitat in the BSA.	Covered
Camissoniopsis lewisii	Lewis' evening-primrose	–	–	3	Sandy or clay soils in coastal bluff scrub, coastal dunes, coastal scrub, cismontane woodland, valley and foothill grassland; 33 to 990 feet above msl.	A	Not expected to occur; lack of suitable habitat in the BSA	Not covered
Centromadia parryi ssp. *australis*	southern tarplant	–	–	1B.1	Margins of marshes and swamps, vernally mesic valley and foothill grassland, vernal pools; 0 to 656 feet above msl.	P	Potential to occur; suitable habitat present in the BSA. Not observed during surveys.	Covered
Dodecahema leptoceras	slender-horned spineflower	–	–	1B.1	Sandy soils of chaparral, cismontane woodland, alluvial fan coastal scrub; 660 to 2,500 feet above msl.	A	Not expected to occur; lack of suitable habitat in the BSA. BSA is outside the elevation range.	Not covered
Dudleya cymosa ssp. *ovatifolia*	Santa Monica Mountains dudleyea	FT	–	1B.1	Chaparral, coastal scrub, volcanic or sedimentary, rocky; 490 to 1,640 feet above msl.	A	Not expected to occur; lack of suitable habitat in the BSA. BSA is outside the elevation range.	Not covered
Dudleya multicaulis	many-stemmed dudleya	–	–	1B.2	Clay soils in chaparral, coastal scrub, valley and foothill grassland; 0 to 1,969 feet above msl.	A	Not expected to occur; lack of suitable habitat in the BSA	Covered
Dudleya stolonifera	Laguna Beach liveforever	FT	ST	1B.1	Cliffs, outcrops, and rocky soils in chaparral, cismontane woodland, coastal scrub, valley and foothill grassland; 0 to 820 feet above msl; coastal areas.	A	Not expected to occur; lack of suitable habitat in the BSA.	Not covered
Helianthus nuttallii ssp. *parishii*	Los Angeles sunflower	–	–	1A	Coastal salt and freshwater marshes and swamps; 0 to 1,641 feet above msl; last observed in 1937.	P	Not expected to occur; species believed to be extinct.	Not covered
Hesperocyparis forbesii	Tecate cypress	–	–	1B.1	Clay, gabbroic or metavolvanic soils of closed-cone coniferous forest, chaparral; 264 to 4,950 feet above msl.	A	Not expected to occur; lack of suitable habitat in the BSA. BSA is outside the elevation range.	Not covered
Hordeum intercedens	vernal barley	–	–	3.2	Saline or alkaline flats and depressions in coastal dunes, coastal scrub, valley and foothill grassland, vernal pools; 0 to 1,641 feet above msl.	A	Not expected to occur; lack of suitable habitat in the BSA.	Not covered
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	–	–	1B.1	Low-lying alkali salt marshes and swamps, playas, vernal pools; 0 to 4,000 feet above msl.	A	Not expected to occur; lack of suitable habitat in the BSA.	Not covered
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	–	–	4.3	Chaparral, coastal scrub; 3 to 2,920 feet above msl.	P (marginal)	Not expected to occur; limited marginally suitable habitat in the BSA.	Not covered
Monardella hypoleuca ssp. *intermedia*	intermediate monardella	–	–	1B.3	Chaparral, cismontane woodland, lower montane coniferous forest; 1,320 to 4,125 feet above msl.	A	Not expected to occur; lack of suitable habitat in the BSA. BSA is outside the elevation range.	Not covered
Nama stenocarpum	mud nama	–	–	2B.2	Margins of marshes and swamps, lake margins, riverbanks; 0 to 2,658 feet above msl.	A	Not expected to occur; lack of suitable habitat in the BSA.	Not covered
Nolina cismontane	chaparral nolina	–	–	1B.2	Sandstone or gabbro soils in chaparral, coastal scrub; 656 to 4,265 feet above msl.	A	Not expected to occur; lack of suitable habitat in the BSA. BSA is outside the elevation range.	Not covered
Pentachaeta aurea ssp. *allenii*	Allen's pentachaeta	–	–	1B.1	Openings in coastal scrub, valley and foothill grasslands; 0 to 1,641 feet above msl.	P (marginal)	Not expected to occur; limited marginally suitable habitat in the BSA	Not covered

Table 2.3.3-1. Special-Status Plant Species Known to Occur in the Project Region

Scientific Name	Common Name	Status			General Habitat Description*	Habitat Present (P)/ Absent (A)	Rationale (Potential for Species to Occur)	Coverage under the OCTA NCCP/HCP
		USFWS	CDFW	CRPR				
Senecio aphanactis	chaparral ragwort	–	–	2B.2	Chaparral, cismontane woodland, coastal scrub in alkali and rocky soils; 50 to 2,640 feet above msl.	A	Not expected to occur; lack of suitable habitat in the BSA	Not covered
Sidalcea neomexicana	salt spring checkerbloom	–	–	2B.2	Alkaline and mesic soils in chaparral, coastal scrub, lower and montane coniferous forests, Mojavean desert scrub, playas, alkaline springs and marshes; 0 to 4,922 feet above msl.	A	Not expected to occur; lack of suitable habitat in the BSA	Not covered
Symphyotrichum defoliatum	San Bernardino aster	–	–	1B.2	Near ditches, streams, springs of cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, vernally mesic valley and foothill grasslands; 5 to 6,730 feet above msl.	P (marginal)	Not expected to occur; limited marginally suitable habitat in the BSA. Previous records in the area are historic (1920s).	Not covered
Verbesina dissita	Big-Leaved crownbeard	FT	ST	1B.1	Southern maritime chaparral; 0 to 656 feet above msl.	A	Not expected to occur; suitable habitat present in the BSA.	Not covered

Source: Caltrans, 2016.

2.3.3.3 Environmental Consequences

Alternative 1 (No Build)

Alternative 1 does not propose any construction or other disturbance in the BSA; therefore, this alternative would not result in long-term impacts and would not cause permanent or temporary direct or indirect impacts.

Build Alternative 2 (Preferred Alternative) and Build Alternative 3

Although direct impacts associated with the build alternatives may occur to some vegetation within the project footprint, all impacts would be limited to landscape plantings. The proposed project is not expected to have any direct or indirect permanent impacts on any special-status plants (NES, June 2016).

Construction (Short-Term) Impacts

The southern tarplant does not occur in the BSA; therefore, there would be no temporary impact to this species or to any special-status plants.

2.3.3.4 Avoidance, Minimization, and/or Mitigation Measures

Because southern tarplant does not occur in the BSA, no avoidance or minimization measures are required. No compensatory mitigation is required.

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